

What is claimed is:

- 1    1.    A video display device comprising:
  - 2            a red color light source to emit red color light;
  - 3            a green color light source to emit green color light;
  - 4            a blue color light source to emit blue color light;
  - 5            at least one spatial light modulator to spatially modulate,
  - 6 according to a video signal for a red color, a video signal for
  - 7 a green color, and a video signal for a blue color, said light
  - 8 fed from said red color light source, said light fed from said
  - 9 green color light source, and said light fed from said blue color
  - 10 light source;
  - 11           a selection controller to select a combination of a video
  - 12 signal for controlling said spatial light modulator and said light
  - 13 to be modulated; and
  - 14           a light quantity controller to control a time mean value
  - 15 of luminous flux of light to be modulated by said spatial light
  - 16 modulator.
- 1    2.    The video display device according to Claim 1, wherein, in
  - 2 said spatial light modulator, following equations hold among
  - 3 chromaticity coordinates  $(x_{r0}, y_{r0})$ ,  $(x_{g0}, y_{g0})$ , and  $(x_{b0}, y_{b0})$
  - 4 for light of a red color, a green color, and a blue color in
  - 5 specifications of colorimetry by which a video signal is defined
  - 6 according to CIE (Commision Internationale de l'Eclairage) 1931
  - 7 standard colorimetric system, a time mean value of luminous flux
  - 8 of each of said red color, said green color, and said blue color,
  - 9 and chromaticity coordinates of said red color light, said green
  - 10 color light, and said blue color light defined in said standard

11 colorimetric system; said following equations comprising:

12

$$13 \quad x_{r0} = (x_r \times L_{rr} / y_r + x_g \times L_{rg} / y_g + x_b \times L_{rb} / y_b) / (L_{rr} / y_r + L_{rg} / y_g$$

$$14 \quad + L_{rb} / y_b)$$

$$15 \quad y_{r0} = (L_{rr} + L_{rg} + L_{rb}) / (L_{rr} / y_r + L_{rg} / y_g + L_{rb} / y_b)$$

$$16 \quad x_{g0} = (x_r \times L_{gr} / y_r + x_g \times L_{gg} / y_g + x_b \times L_{gb} / y_b) / (L_{gr} / y_r + L_{gg} / y_g$$

$$17 \quad + L_{gb} / y_b)$$

$$18 \quad y_{g0} = (L_{gr} + L_{gg} + L_{gb}) / (L_{gr} / y_r + L_{gg} / y_g + L_{gb} / y_b)$$

$$19 \quad x_{b0} = (x_r \times L_{br} / y_r + x_g \times L_{bg} / y_g + x_b \times L_{bb} / y_b) / (L_{br} / y_r + L_{bg} / y_g$$

$$20 \quad + L_{bb} / y_b)$$

$$21 \quad y_{b0} = (L_{br} + L_{bg} + L_{bb}) / (L_{br} / y_r + L_{bg} / y_g + L_{bb} / y_b)$$

22 wherein:

23 said  $L_{rr}$  represents a time mean value of luminous flux of red color  
 24 light to be modulated according to a video signal for a red color,  
 25 said  $L_{gr}$  represents a time mean value of luminous flux of red color  
 26 light to be modulated according to a video signal for a green color,  
 27 said  $L_{br}$  represents a time mean value of luminous flux of red color  
 28 light to be modulated according to a video signal for a blue color,  
 29 said  $L_{rg}$  represents a time mean value of luminous flux of green  
 30 color light to be modulated according to a video signal for a red  
 31 color,

32 said  $L_{gg}$  represents a time mean value of luminous flux of green  
 33 color light to be modulated according to a video signal for a green  
 34 color,

35 said  $L_{bg}$  represents a time mean value of luminous flux of green  
 36 color light to be modulated according to a video signal for a blue  
 37 color,

38 said  $L_{rb}$  represents a time mean value of luminous flux of blue  
 39 color light to be modulated according to a video signal for a red

40 color,  
 41 said Lgb represents a time mean value of luminous flux of blue  
 42 color light to be modulated according to a video signal for a green  
 43 color,  
 44 said Lbb represents a time mean value of luminous flux of blue  
 45 color light to be modulated according to a video signal for a blue  
 46 color,  
 47 dsid (xr, yr), said (xg, yg), and said (xb, yb) represent  
 48 chromaticity coordinates of said red color light, said green color  
 49 light, and said blue color light, respectively, according to said  
 50 standard colorimetric system.

1 3. The video display device according to Claim 2, wherein  
 2 following equations hold between chromaticity of coordinates (xr0,  
 3 yr0), (xg0, yg0), and (xb0, yb0) of light of, respectively, red,  
 4 green, and blue colors in specifications of colorimetry by which  
 5 a video signal is defined according to said standard colorimetric  
 6 system and chromaticity coordinates (xw, yw) of light of a  
 7 standard white color in specifications of colorimetry by which  
 8 a video signal is defined according to CIE (Commision  
 9 Internationale de l'Eclairage) 1931 standard colorimetric  
 10 system:

11

$$12 \quad xw = (xr0 \times Lr / yr0 + xg0 \times Lg / yg0 + xb0 \times Lb / yb0) / (Lr / yr0 + Lg / yg0$$

$$13 \quad + Lb / yb0)$$

$$14 \quad yw = (Lr + Lg + Lb) / (Lr / yr0 + Lg / yg0 + Lb / yb0)$$

15

16 wherein:

17 said Lr is defined to be Lrr + Lrg + Lrb,

18 said  $L_g$  is defined to be  $L_{gr} + L_{gg} + L_{gb}$ , and  
 19 said  $L_b$  is defined to be  $L_{br} + L_{bg} + L_{bb}$ .

1 4. The video display device according to Claim 1, wherein, in  
 2 said spatial light modulator, following equations hold between  
 3 chromaticity coordinates  $(x_r, y_r)$ ,  $(x_g, y_g)$ , and  $(x_b, y_b)$  of,  
 4 respectively, red color light, green color light, and blue color  
 5 light according to said CIE (Commision Internationale de  
 6 l'Eclairage) 1931 standard colorimetric system and chromaticity  
 7 coordinates  $(x_w, y_w)$  of a standard white color in specifications  
 8 of colorimetry by which a video signal is defined as:

9  
 10 
$$x_w = (x_{r1} \times L_r / y_{r1} + x_{g1} \times L_g / y_{g1} + x_{b1} \times L_b / y_{b1}) / (L_r / y_{r1} + L_g / y_{g1} + L_b / y_{b1})$$
  
 11  
 12 
$$y_w = (L_r + L_g + L_b) / (L_r / y_{r1} + L_g / y_{g1} + L_b / y_{b1})$$

13

14 wherein:

15 said  $L_{rr}$  represents a time mean value of luminous flux of red color  
 16 light to be modulated according to a video signal for a red color,  
 17 said  $L_{gr}$  represents a time mean value of luminous flux of red color  
 18 light to be modulated according to a video signal for a green color,  
 19 said  $L_{br}$  represents a time mean value of luminous flux of red color  
 20 light to be modulated according to a video signal for a blue color,  
 21 said  $L_{rg}$  represents a time mean value of luminous flux of green  
 22 color light to be modulated according to a video signal for a red  
 23 color,  
 24 said  $L_{gg}$  represents a time mean value of luminous flux of green  
 25 color light to be modulated according to a video signal for a green  
 26 color,

27 said  $L_{bg}$  represents a time mean value of luminous flux of green  
 28 color light to be modulated according to a video signal for a blue  
 29 color,  
 30 said  $L_{rb}$  represents a time mean value of luminous flux of blue  
 31 color light to be modulated according to a video signal for a red  
 32 color,  
 33 said  $L_{gb}$  represents a time mean value of luminous flux of blue  
 34 color light to be modulated according to a video signal for a green  
 35 color,  
 36 said  $L_{bb}$  represents a time mean value of luminous flux of blue  
 37 color light to be modulated according to a video signal for a blue  
 38 color, and  
 39 wherein:  
 40 said  $L_r$  is defined to be  $L_{rr} + L_{rg} + L_{rb}$ ,  
 41 said  $L_g$  is defined to be  $L_{gr} + L_{gg} + L_{gb}$ ,  
 42 said  $L_b$  is defined to be  $L_{br} + L_{bg} + L_{bb}$ ,  
 43 said  $x_{rl}$  is defined to be  $(x_r \times L_{rr} / y_r + x_g \times L_{rg} / y_g + x_b \times L_{rb} / y_b)$   
 44  $/ (L_{rr} / y_r + L_{rg} / y_g + L_{rb} / y_b)$ ,  
 45 said  $y_{rl}$  is defined to be  $(L_{rr} + L_{rg} + L_{rb}) / (L_{rr} / y_r + L_{rg} / y_g$   
 46  $+ L_{rb} / y_b)$   
 47 said  $x_{gl}$  is defined to be  $(x_r \times L_{gr} / y_r + x_g \times L_{gg} / y_g + x_b \times L_{gb} / y_b)$   
 48  $/ (L_{gr} / y_r + L_{gg} / y_g + L_{gb} / y_b)$   
 49 said  $y_{gl}$  is defined to be  $(L_{gr} + L_{gg} + L_{gb}) / (L_{gr} / y_r + L_{gg} / y_g$   
 50  $+ L_{gb} / y_b)$   
 51 said  $x_{bl}$  is defined to be  $(x_r \times L_{br} / y_r + x_g \times L_{bg} / y_g + x_b \times L_{bb} / y_b)$   
 52  $/ (L_{br} / y_r + L_{bg} / y_g + L_{bb} / y_b)$  and  
 53 said  $y_{bl}$  is defined to be  $(L_{br} + L_{bg} + L_{bb}) / (L_{br} / y_r + L_{bg} / y_g$   
 54  $+ L_{bb} / y_b)$

1 5. The video display device according to Claim 1, wherein  
2 following expressions hold:

3

4  $P_{rr} = P_{gr} = P_{br}$

5  $P_{rg} = P_{gg} = P_{bg}$

6  $P_{rb} = P_{gb} = P_{bb}$

7

8 Wherein:

9 Said  $P_{rr}$ , said  $P_{gr}$ , and said  $P_{br}$  represent luminous flux of red  
10 color light to be modulated according to a video signal for a red  
11 color, a video signal for a green color, and a video signal for  
12 a blue color, respectively,

13 Said  $P_{rg}$ , said  $P_{gg}$ , and said  $P_{bg}$  represent luminous flux of green  
14 color light to be modulated according to a video signal for a red  
15 color, a video signal for a green color, and a video signal for  
16 a blue color, respectively, and

17 Said  $P_{rb}$ , said  $P_{gb}$ , and said  $P_{bb}$  represent luminous flux of blue  
18 color light to be modulated according to a video signal for a red  
19 color, a video signal for a green color, and a video signal for  
20 a blue color, respectively.

1 6. The video display device according to Claim 1, wherein a  
2 period is provided during which all light sources for each color  
3 are turned OFF during one frame period.

1 7. The video display device according to Claim 1, wherein a  
2 light source for said red color light, said green color light,  
3 said blue color light, or said white color light comprises a light  
4 emitting diode.

1 8. The video display device according to Claim 7, wherein said  
2 light source for said red color light, said green color light,  
3 said blue color light, or said white color light comprises a  
4 plurality of said light emitting diodes.

1 9. A video display device comprising:

2 a light applying unit to adjust luminous flux of each of  
3 a red color light, a green color light, and a blue color light  
4 and to switch said red color light, said green color light, and  
5 said blue color light in terms of time and to sequentially emit  
6 said red color light, said green color light, and said blue color  
7 light;

8 a spatial light modulator to spatially modulate light fed  
9 from said light applying unit; and

10 wherein said light applying unit is controlled so that, when  
11 luminous flux of said red color light being emitted while said  
12 spatial light modulator is driven according to a video signal for  
13 a red color is expressed as  $P_r$ , when luminous flux of said green  
14 color light being emitted while said spatial light modulator is  
15 driven according to a video signal for a green color is expressed  
16 as  $P_g$ , and when luminous flux of said blue color light being emitted  
17 while said spatial light modulator is driven according to a video  
18 signal for a blue color is expressed as  $P_b$ , both said green color  
19 light having luminous flux of  $K \times P_g$  ( $k$  being a coefficient and  
20  $0 \leq K \leq 1$  same as above) and said blue color light having luminous  
21 flux of  $K \times P_b$  together with said red color light are applied when  
22 said spatial light modulator is driven according to said video  
23 signal for a red color, both said blue color light having luminous  
24 flux of  $K \times P_b$  and said red color light having luminous flux of

25  $K \times Pr$  together with said green color light are applied when said  
26 spatial light modulator is driven according to said video signal  
27 for a green color and both said red color light having luminous  
28 flux of  $K \times Pr$ , and said green color light having luminous flux  
29 of  $K \times Pg$  together with said blue color light are applied when said  
30 spatial light modulator is driven according to said video signal  
31 for a blue color.

1 10. The color-sequence-type video display device according to  
2 Claim 9, wherein, in said light applying unit, a value of said  
3 coefficient  $k$  is configured to be able to be changed.

1 11. The video display device according to Claim 9, wherein a  
2 light source for said red color light, said green color light,  
3 said blue color light, or said white color light comprises a light  
4 emitting diode.

1 12. The video display device according to Claim 11, wherein said  
2 light source for said red color light, said green color light,  
3 said blue color light, or said white color light comprises a  
4 plurality of said light emitting diodes.

1 13. A video display device comprising:  
2 a light applying unit to adjust luminous flux of each of  
3 red color light, green color light, and blue color light and to  
4 switch said red color light, said green color light, and said blue  
5 color light in terms of time and to sequentially emit said red  
6 color light, said green color light, and said blue color light;  
7 a spatial light modulator to spatially modulate light fed



8 from said light applying unit; and  
9 wherein said light applying unit is controlled so that red  
10 color light and white color light are applied to said spatial light  
11 modulator while said spatial light modulator is driven according  
12 to a video signal for a red color, a green color light and a white  
13 color light are applied to said spatial light modulator while said  
14 spatial light modulator is driven according to a video signal for  
15 a green color, and a blue color light and a white color light  
16 are applied to said spatial light modulator while said spatial  
17 light modulator is driven according to a video signal for a blue  
18 color.

1 14. The video display device according to Claim 13, wherein said  
2 white color light is applied to said spatial light modulator  
3 according to driving timing for said spatial light modulator by  
4 said video signal for a red color, said video signal for a green  
5 color, and said video signal for a blue color.

1 15. The video display device according to Claim 13, wherein said  
2 white color light is being lighted all the time.

1 16. The video display device according to Claim 13, wherein  
2 brightness of said white color light is configured to be able to  
3 be changed by external control.

1 17. The video display device according to Claim 13, wherein a  
2 light source for said red color light, said green color light,  
3 said blue color light, or said white color light comprises a light  
4 emitting diode.

1 18. The video display device according to Claim 17, wherein said  
2 light source for said red color light, said green color light,  
3 said blue color light, or said white color light comprises a  
4 plurality of said light emitting diodes.

1 19. A video display device comprising:  
2 a red color light source to emit red color light;  
3 a green color light source to emit green color light;  
4 a blue color light source to emit blue color light;  
5 at least one spatial light modulating means to spatially  
6 modulate, according to a video signal for a red color, a video  
7 signal for a green color, and a video signal for a blue color,  
8 said light fed from said red color light source, said light fed  
9 from said green color light source, and said light fed from said  
10 blue color light source;  
11 a selection controlling means to select a combination of  
12 a video signal for controlling said spatial light modulating means  
13 and said light to be modulated; and  
14 a light quantity control means to control a time mean value  
15 of luminous flux of light to be modulated by said spatial light  
16 modulating means.

1 20. The video display device according to Claim 19, wherein,  
2 in said spatial light modulating means, following equations hold  
3 among chromaticity coordinates  $(x_{r0}, y_{r0})$ ,  $(x_{g0}, y_{g0})$ , and  $(x_{b0},$   
4  $y_{b0})$  for light of a red color, a green color, and a blue color  
5 in specifications of colorimetry by which a video signal is  
6 defined according to CIE (Commision Internationale de  
7 l'Eclairage) 1931 standard colorimetric system, a time mean value

8 of luminous flux of each of said red color, said green color, and  
 9 said blue color, and chromaticity coordinates of said red color  
 10 light, said green color light, and said blue color light defined  
 11 in said standard colorimetric system; said following equations  
 12 comprising:

13

$$14 \quad x_{r0} = (x_r \times L_{rr} / y_r + x_g \times L_{rg} / y_g + x_b \times L_{rb} / y_b) / (L_{rr} / y_r + L_{rg} / y_g$$

$$15 \quad + L_{rb} / y_b)$$

$$16 \quad y_{r0} = (L_{rr} + L_{rg} + L_{rb}) / (L_{rr} / y_r + L_{rg} / y_g + L_{rb} / y_b)$$

$$17 \quad x_{g0} = (x_r \times L_{gr} / y_r + x_g \times L_{gg} / y_g + x_b \times L_{gb} / y_b) / (L_{gr} / y_r + L_{gg} / y_g$$

$$18 \quad + L_{gb} / y_b)$$

$$19 \quad y_{g0} = (L_{gr} + L_{gg} + L_{gb}) / (L_{gr} / y_r + L_{gg} / y_g + L_{gb} / y_b)$$

$$20 \quad x_{b0} = (x_r \times L_{br} / y_r + x_g \times L_{bg} / y_g + x_b \times L_{bb} / y_b) / (L_{br} / y_r + L_{bg} / y_g$$

$$21 \quad + L_{bb} / y_b)$$

$$22 \quad y_{b0} = (L_{br} + L_{bg} + L_{bb}) / (L_{br} / y_r + L_{bg} / y_g + L_{bb} / y_b)$$

23 wherein:

24 said  $L_{rr}$  represents a time mean value of luminous flux of red color  
 25 light to be modulated according to a video signal for a red color,  
 26 said  $L_{gr}$  represents a time mean value of luminous flux of red color  
 27 light to be modulated according to a video signal for a green color,  
 28 said  $L_{br}$  represents a time mean value of luminous flux of red color  
 29 light to be modulated according to a video signal for a blue color,  
 30 said  $L_{rg}$  represents a time mean value of luminous flux of green  
 31 color light to be modulated according to a video signal for a red  
 32 color,

33 said  $L_{gg}$  represents a time mean value of luminous flux of green  
 34 color light to be modulated according to a video signal for a green  
 35 color,

36 said  $L_{bg}$  represents a time mean value of luminous flux of green

37 color light to be modulated according to a video signal for a blue  
 38 color,  
 39 said Lrb represents a time mean value of luminous flux of blue  
 40 color light to be modulated according to a video signal for a red  
 41 color,  
 42 said Lgb represents a time mean value of luminous flux of blue  
 43 color light to be modulated according to a video signal for a green  
 44 color,  
 45 said Lbb represents a time mean value of luminous flux of blue  
 46 color light to be modulated according to a video signal for a blue  
 47 color,  
 48 dsid (xr, yr), said (xg, yg), and said (xb, yb) represent  
 49 chromaticity coordinates of said red color light, said green color  
 50 light, and said blue color light, respectively, according to said  
 51 standard colorimetric system.

1 21. The video display device according to Claim 20, wherein  
 2 following equations hold between chromaticity of coordinates (xr0,  
 3 yr0), (xg0, yg0), and (xb0, yb0) of light of, respectively, red,  
 4 green, and blue colors in specifications of colorimetry by which  
 5 a video signal is defined according to said standard colorimetric  
 6 system and chromaticity coordinates (xw, yw) of light of a  
 7 standard white color in specifications of colorimetry by which  
 8 a video signal is defined according to CIE (Commision  
 9 Internationale de l'Eclairage) 1931 standard colorimetric  
 10 system:

11  
 12 
$$xw = (xr0 \times Lr / yr0 + xg0 \times Lg / yg0 + xb0 \times Lb / yb0) / (Lr / yr0 + Lg / yg0$$
 13 
$$+ Lb / yb0)$$

14  $yw = (Lr + Lg + Lb) / (Lr/yr0 + Lg/yg0 + Lb/yb0)$

15

16 wherein:

17 said Lr is defined to be  $Lrr + Lrg + Lrb$ ,

18 said Lg is defined to be  $Lgr + Lgg + Lgb$ , and

19 said Lb is defined to be  $Lbr + Lbg + Lbb$ .

1 22. The video display device according to Claim 19, wherein,  
 2 in said spatial light modulating means, following equations hold  
 3 between chromaticity coordinates  $(xr, yr)$ ,  $(xg, yg)$ , and  $(xb, yb)$   
 4 of, respectively, red color light, green color light, and blue  
 5 color light according to said CIE (Commision Internationale de  
 6 l'Eclairage) 1931 standard colorimetric system and chromaticity  
 7 coordinates  $(xw, yw)$  of a standard white color in specifications  
 8 of colorimetry by which a video signal is defined as:

9

10  $xw = (xrl \times Lr/yr1 + xgl \times Lg/ygl + xbl \times Lb/ybl) / (Lr/yr1 + Lg/ygl$   
 11  $+ Lb/ybl)$

12  $yw = (Lr + Lg + Lb) / (Lr/yr1 + Lg/ygl + Lb/ybl)$

13

14 wherein:

15 said Lrr represents a time mean value of luminous flux of red color  
 16 light to be modulated according to a video signal for a red color,  
 17 said Lgr represents a time mean value of luminous flux of red color  
 18 light to be modulated according to a video signal for a green color,  
 19 said Lbr represents a time mean value of luminous flux of red color  
 20 light to be modulated according to a video signal for a blue color,  
 21 said Lrg represents a time mean value of luminous flux of green  
 22 color light to be modulated according to a video signal for a red

23 color,  
 24 said Lgg represents a time mean value of luminous flux of green  
 25 color light to be modulated according to a video signal for a green  
 26 color,  
 27 said Lbg represents a time mean value of luminous flux of green  
 28 color light to be modulated according to a video signal for a blue  
 29 color,  
 30 said Lrb represents a time mean value of luminous flux of blue  
 31 color light to be modulated according to a video signal for a red  
 32 color,  
 33 said Lgb represents a time mean value of luminous flux of blue  
 34 color light to be modulated according to a video signal for a green  
 35 color,  
 36 said Lbb represents a time mean value of luminous flux of blue  
 37 color light to be modulated according to a video signal for a blue  
 38 color, and  
 39 wherein:  
 40 said Lr is defined to be  $L_{rr} + L_{rg} + L_{rb}$ ,  
 41 said Lg is defined to be  $L_{gr} + L_{gg} + L_{gb}$ ,  
 42 said Lb is defined to be  $L_{br} + L_{bg} + L_{bb}$ ,  
 43 said xrl is defined to be  $(x_r \times L_{rr}/y_r + x_g \times L_{rg}/y_g + x_b \times L_{rb}/y_b)$   
 44  $/ (L_{rr}/y_r + L_{rg}/y_g + L_{rb}/y_b)$ ,  
 45 said yrl is defined to be  $(L_{rr} + L_{rg} + L_{rb}) / (L_{rr}/y_r + L_{rg}/y_g$   
 46  $+ L_{rb}/y_b)$   
 47 said xgl is defined to be  $(x_r \times L_{gr}/y_r + x_g \times L_{gg}/y_g + x_b \times L_{gb}/y_b)$   
 48  $/ (L_{gr}/y_r + L_{gg}/y_g + L_{gb}/y_b)$   
 49 said ygl is defined to be  $(L_{gr} + L_{gg} + L_{gb}) / (L_{gr}/y_r + L_{gg}/y_g$   
 50  $+ L_{gb}/y_b)$   
 51 said xbl is defined to be  $(x_r \times L_{br}/y_r + x_g \times L_{bg}/y_g + x_b \times L_{bb}/y_b)$

52 / (Lbr/yr + Lbg/yg + Lbb/yb) and  
 53 said ybl is defined to be (Lbr + Lbg + Lbb) / (Lbr/yr + Lbg/yg  
 54 + Lbb/yb)

1 23. The video display device according to Claim 19, wherein  
 2 following expressions hold:

3

4  $P_{rr} = P_{gr} = P_{br}$

5  $P_{rg} = P_{gg} = P_{bg}$

6  $P_{rb} = P_{gb} = P_{bb}$

7

8 Wherein:

9 Said  $P_{rr}$ , said  $P_{gr}$ , and said  $P_{br}$  represent luminous flux of red  
 10 color light to be modulated according to a video signal for a red  
 11 color, a video signal for a green color, and a video signal for  
 12 a blue color, respectively,

13 Said  $P_{rg}$ , said  $P_{gg}$ , and said  $P_{bg}$  represent luminous flux of green  
 14 color light to be modulated according to a video signal for a red  
 15 color, a video signal for a green color, and a video signal for  
 16 a blue color, respectively, and

17 Said  $P_{rb}$ , said  $P_{gb}$ , and said  $P_{bb}$  represent luminous flux of blue  
 18 color light to be modulated according to a video signal for a red  
 19 color, a video signal for a green color, and a video signal for  
 20 a blue color, respectively.

1 24. A video display device comprising:

2 a light applying means to adjust luminous flux of each of  
 3 a red color light, a green color light, and a blue color light  
 4 and to switch said red color light, said green color light, and

5 said blue color light in terms of time and to sequentially emit  
6 said red color light, said green color light, and said blue color  
7 light;

8 a spatial light modulating means to spatially modulate  
9 light fed from said light applying means; and

10 wherein said light applying means is controlled so that,  
11 when luminous flux of said red color light being emitted while  
12 said spatial light modulating means is driven according to a video  
13 signal for a red color is expressed as  $P_r$ , when luminous flux of  
14 said green color light being emitted while said spatial light  
15 modulating means is driven according to a video signal for a green  
16 color is expressed as  $P_g$ , and when luminous flux of said blue color  
17 light being emitted while said spatial light modulating means is  
18 driven according to a video signal for a blue color is expressed  
19 as  $P_b$ , both said green color light having luminous flux of  $K$   
20  $\times P_g$  ( $k$  being a coefficient and  $0 \leq K \leq 1$  same as above) and said  
21 blue color light having luminous flux of  $K \times P_b$  together with said  
22 red color light are applied when said spatial light modulating  
23 means is driven according to said video signal for a red color,  
24 both said blue color light having luminous flux of  $K \times P_b$  and said  
25 red color light having luminous flux of  $K \times P_r$  together with said  
26 green color light are applied when said spatial light modulating  
27 means is driven according to said video signal for a green color  
28 and both said red color light having luminous flux of  $K \times P_r$ , and  
29 said green color light having luminous flux of  $K \times P_g$  together with  
30 said blue color light are applied when said spatial light  
31 modulating means is driven according to said video signal for a  
32 blue color.



1 25. The color-sequence-type video display device according to  
2 Claim 24, wherein, in said light applying means, a value of said  
3 coefficient  $k$  is configured to be able to be changed.

1 26. A video display device comprising:  
2 a light applying means to adjust luminous flux of each of  
3 red color light, green color light, and blue color light and to  
4 switch said red color light, said green color light, and said blue  
5 color light in terms of time and to sequentially emit said red  
6 color light, said green color light, and said blue color light;  
7 a spatial light modulating means to spatially modulate  
8 light fed from said light applying means; and  
9 wherein said light applying means is controlled so that red  
10 color light and white color light are applied to said spatial light  
11 modulating means while said spatial light modulating means is  
12 driven according to a video signal for a red color, a green color  
13 light and a white color light are applied to said spatial light  
14 modulating means while said spatial light modulating means is  
15 driven according to a video signal for a green color, and a blue  
16 color light and a white color light are applied to said spatial  
17 light modulating means while said spatial light modulating means  
18 is driven according to a video signal for a blue color.

1 27. The video display device according to Claim 26, wherein said  
2 white color light is applied to said spatial light modulating  
3 means according to driving timing for said spatial light  
4 modulating means by said video signal for a red color, said video  
5 signal for a green color, and said video signal for a blue color.

1 28. The video display device according to Claim 26, wherein said  
2 white color light is being lighted all the time.